Digitizing English as a Foreign Language (EFL) Curricula in the Light of Digital Transformation and COVID−19 Pandemic

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Abstract:

The research aimed at identifying university professors and students' attitudes towards digitizing EFL curricula in the light of digital transformation vision of Egyptian higher education and COVID− 19 pandemic. It utilized two attitude scales, one scale was administered on professors and the other was administered on students at South Valley University in Hurghada. The participants were (21) professors and (82) students at from South Valley University in Hurghada. Following a descriptive analytical research design, the research utilized the instruments to record the results and interpret them in the light of its hypotheses. Results showed that the participants (professors and students) have high positive attitudes towards digitizing English curricula. Additionally, there was a strong correlation between the participants' attitudes towards digitizing English curricula over the four sections of the attitude scales (perceptions of digital transformation & digitizing curricula, using electronic tools in learning, e− assessment practices and digital competences). Recommendations of the research included holding workshops and trainings that are required to develop

digital competences of both students and faculty members. It also recommended involving students in setting a framework for digitizing curricula for better learning practices.

Key words: *Digitizing* EFL Curricula– Digital Transformation– COVID-19

رقمنة مناهج اللغة الإنجليزية كلغة أجنبية في ضوء التحول الرقمي ووباء كوفيد-19

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أستاذ المناهج وطرق تدريس اللغة الإنجليزية المساعد – كلية التربية بالغردقة ـ جامعة جنوب الوادي

مستخلص:

هدف البحث إلى التعرف على اتجاهات أساتذة الجامعة والطلاب نحو رقمنة مناهج اللغة الإنجليزية في ضوء رؤية التحول الرقمي للتعليم العالي المصري و أزمة كوفيد-19. تكونت أدوات البحث من مقياسين اتجاه، مقياس تم تطبيقه على أساتذة الجامعة والآخر تم تطبيقه على الطلاب بجامعة جنوب الوادي فرع الغردقة. تكونت عينة البحث من (21) من أساتذة الجامعة و (82) من طلاب الجامعة. واتبع البحث المنهج الوصفي التحليلي بتطبيق الأدوات وتسجيل النتائج وتفسيرها في ضوء فروض البحث. وأشارت النتائج إلى أن عينة المشاركين بالبحث (أساتذة الجامعة والطلاب) لديهم اتجاه إيجابي مرتفع نحو رقمنة مناهج اللغة الإنجليزية، وكذلك وجود علاقة ارتباطية قوية بين اتجاهات المشاركين تجاه رقمنة مناهج اللغة الإنجليزية في الأقسام الأربعة لمقياسي الاتجاه (تصورات التحول الرقمي والمناهج الرقمية، واستخدام الأدوات الإلكترونية في التعلم، وممارسات التقييم الإلكتروني، والكفايات الرقمية). وتضمنت توصيات البحث عقد ورش عمل ودورات تدريبية لتنمية الكفايات الرقمية لكلا من الطلاب وأعضاء هيئة التدريس.، وكذلك إشراك الطلاب في وضع تصور مقترح لرقمنة المناهج من أجل ممارسات تعليمية أفضل.

الكلمات المفتاحية : رقمنة مناهج اللغة الإنجليزية، التحول الرقمي، كوفيد

1. Introduction

Digital transformation is a national vision that concerns educational stakeholders in most educational institutions and programs. Higher education institutions worldwide started to implement digital transformation in all university programs. This can save cost, reduce administration procedures, easily manage data, enhance teaching staff's efficiency and productivity, provide learners with twentieth first century skills and optimize learning and teaching. Due to modern developments and trends towards digital learning, there is a big need for digitizing curricula and integrating E− assessment with its various forms for the gains it entails in this challenging era. According to the Egyptian vision 2030, the fourth aim of the vision is to support higher education through both training and development. Digital transformation can achieve sustainable development, including the digital readiness dimension which measures the relationship between the level of digital education and the ability to apply them. Moreover, in line with Egypt's higher education and research strategy that aims to promote science, technology, and innovation within higher education institutions and research centers, Egypt has taken steady steps in the digital transformation direction, which have been amplified with the COVID−19 crisis (Kamel, 2021). Therefore, digital transformation becomes a mandate for governments to shape the future. According to Egypt's vision 20230, digital transformation provides access to education for all, creates a quality and relevant educational system in accordance with the international standards, improves the quality of learning, and

develops enthusiastic and passionate teachers and pupils who learn, think and innovate. This is accompanied with using new technologies such as virtual reality (VR) and augmented reality (AR), deep learning, artificial intelligence (AI), and Internet of Things (IoT) (Elgohary, 2021).

Digital transformation leads to an organizational shift, where big data, analytics, cloud computing, mobile applications and even social media platforms have become omnipresent (Nwankpa & Roumani, 2016). Petkovics (2018) views that digital transformation covers a lot more than the simple implementation of new ICT technologies (cloud computing, internet of things, big data, block chain, artificial intelligence and machine learning).Electronic learning is a key component of digital transformation in higher education institutions.

Higher education institutions attempt to fulfill the requirements of e-learning to provide future services for students, staff and educational institutions (Zabadi & Al-Alawi, 2016). Universities focus on preparing future professionals to handle future challenges and search for solutions, including digital competence as a vital skill set (Bond et al, 2018). E-learning is one of the most fashionable trends in contemporary teaching. It is an integrated and student- centered system of education. Students use E- learning forms for the processing, transmission and storage of information on activities, problem solving, evaluation, communication, administration and management of education (Gluchmanova, 2017). Learners feel independent in studying, searching for knowledge and communicating with their teachers and peers. As a result, E- learning promotes autonomous learning.

Digital learning environments reinforce autonomous learning through receiving feedback and interaction during the learning process, they promote intrinsic motivation. A learner with positive attitude enjoys learning English language and does any required task to learn the language (Makewa, Role & Tuguta, 2013). On the contrary, Abu-Melhim (2009) views that negative attitudes can affect learners' engagement in learning activities. As a result of these negative attitudes, some learners become either neglectful towards English and their teachers' instructions, or evaluate learning activities as useless.

Moreover, Digitizing curricula makes use of modern technologies in providing students with more attractive learning content and placing them at the center of a more engaging, dynamic, accessible and positive setting. This can expand students' perceptions and develop their autonomous learning. In addition, it brings an attractive and supportive atmosphere during learning process, leading to more positive attitudes towards EFL learning.

One of the key reasons that led to the spread of curricula digitization and e-learning implementation is Corona Virus pandemic. The outbreak of novel Corona virus (COVID-19) has caused a state of global panic during the period extending from the beginning of its spread in December 2019. The outbreak of the virus has been classified as a pandemic, which means that it is out of control. International organizations that concerned with human health have linked it to the terrible increase of infection and death rate around the world as the rate has reached the stage of danger (Deng & Peng, 2020). In light of this,

countries have taken a series of measures, including suspending study at all educational institutions from primary to university levels and widely implementing digital education instead of frontal setting.

According to UNESCO report about pandemic education (2020), there is a need to rethink about the prevailing educational practices, concepts and attitudes towards e-learning and digitization. For instance, the report stated that "Within the framework of the suspension of face-to-face classes, the need to maintain educational continuity has presented challenges to which countries have responded with different remote options and solutions, including adjusting the school calendar and how the curriculum is implemented, all adapted, prioritized and adjusted in various ways" (p.3). Therefore, measuring stakeholders' attitudes in the educational programs is a key point of research and study and this is what the research aims to pursue in higher education context.

Summing up, the above considerations highlight the need to investigate university EFL students' and professors' views and attitudes towards digitizing EFL curricula on the light of digital transformation of Egyptian higher education.

2. Objectives of the research

The research aims at identifying:

1. University students' attitudes towards digitizing EFL curricula in the light of digital transformation of Egyptian higher education and COVID-19 pandemic.

2. Professors' attitudes towards designing EFL curricula in the light of digital transformation of Egyptian higher education and COVID- 19 Pandemic.

3. Significance of the research

1. Identifying the prevailing attitudes of both professors and students about digital transformation vision in the light of digital transformation of Egyptian higher education and COVID- 19 pandemic.

2. Identifying the core digital skills that university students and professors need to acquire.

3. Benefitting course designers in preparing adequate digital curricula that address students' need through better practices.

4. Discussing the concept of digitizing curricula as a required demand of digital transformation of higher education with its pertinent literature.

5. Framing the implementation of the appropriate E- assessment procedures and tools that cope with digital transformation.

6. Contextualizing digital transformation and pandemic education practices with reference to the Egyptian higher education vision for sustainable development.

4. Questions of the research:

The research seeks to answer the following questions:

1. What are EFL students' and professors' attitudes towards digitizing EFL curricula in the light of digital transformation of Egyptian higher education and COVID- 19 pandemic?

2. Is there a correlation between the participants' attitudes towards digitizing EFL curricula over the four parts of the attitude scales

(perceptions, using electronic tools in learning, e– assessment practices and digital competences)?

5. Hypotheses of the research

The research hypothesizes the following:

5.1. There is a positive attitude towards digitizing English curricula among the research participants.

5.2. There is a strong correlation between the participants' attitudes towards digitizing English curricula over the four parts of the attitude scales (perceptions, using electronic tools in learning, e– assessment practices and digital competences).

6. Research Design

Due to the descriptive nature of the research, it follows the analytical descriptive design. It aimed at collecting data both professors and students' attitudes towards digitizing English curricula using a research instrument and analyzing the obtained curricula. The research utilized (2) scales that were validated and piloted over both professors and students at South Valley University, Hurghada branch. Responses of the participants were collected and analyzed using SPSS.

7. Instrumentation:

A survey is conducted through two attitudes scales; one scale is administered on students and the other is administered on professors. Each scale included (40) items which were divided over four parts; (a) Perceptions of digital transformation & digitizing curricula,(b) Awareness of using electronic tools in learning, (c)E– Assessment Practices and (d)Digital Competences of designing digital content. The scales are

aimed to identify their views and attitudes towards digitizing EFL curricula in the light of digital transformation of Egyptian higher education and COVID− 19, as well as to obtain information about the phenomenon needed to be investigated. The scales were adjusted in terms of validity and reliability. Validity was run through content validity (jury validation) and through square root of the (r) value and were (0.80), (0.90). Using Cranach's Alpha statistics, r values were (0.901), (0.789) which are high reliability coefficients.

8. Participants

The study sample consisted of (21) university professors and instructors of curricula and methodology; it also included (82) students of English department. They were randomly selected in a voluntarily basis and responded to the scales of the research. They were adjusted to specialization (Curricula and TEFL methodology) and place (South Valley University).

9. Literature Review

Since the widespread of COVID− 19 pandemic, global warnings confirm the seriousness of the situation, which is dangerous due to the risks, posed by the novel virus its fast and frightening outbreak. In response to COVID−19, Bedford, et al. (2020) study indicates that several countries adopted various restrictions with a view to prevent the spread of the epidemic. Public health experts and government officials have taken number of precautionary measures, including quarantine, social distancing, and the widespread closing of various educational institutions as schools, colleges, universities and others. In this regard,

Bozkurt & Sharma (2020) refer that the closure of universities campuses has created a new challenge for students. Thus, universities should be creative and innovate in launching digital education.

Attitudes have been long concentrated in social sciences research. Mourad (2015) states that the most common definition for attitude is that "attitudes are positive or negative evaluations of somebody or something" (p.71). Lasagabaster (2015) defines attitude as "a positive or negative feeling about some person, object or issue acquired through social interaction" (p.21). Sjöholm (2004) adds that attitudes can be defined as "…evaluative self descriptions or self-perceptions of the activity of learning languages" (p.687). Thus, teachers should foster positive language attitudes amongst students. Research indicates that positive attitudes make learners feel comfortable (Al-Bustan & Al-Bustan, 2009). Learning in a supportive environment that encourages different languages and cultures plays a role in students' positive attitudes (Fielding, 2015). Factors like attitude, anxiety, classroom activities, motivation, and learning resources can influence English learning.

Studying attitudes has been and indeed continue to be the focus of a great deal of research throughout the social sciences (McKenzie, 2010). Attitude concept is considered as an essential component in language learning. So, a positive attitude should be the umbrella of language learning (Abidin, 2012).Starks & Paltridge (1994) state that learning a language is closely related to the attitudes towards the languages. If a learner does not have the interest about learning a

language, he/she will possess a negative attitude and will not be motivated in language learning. Therefore, learners' attitudes may influence language learning. Thus, positive attitudes can be expected to enhance learning whereas negative attitudes may impede language learning.

E-learning can be an effective strategy to learn languages through merging videos or presentations, enabling assessment to measure the level of achievement and weak students' learning (Raj, Chin, Mogindol & Apolonius, 2016). Working outside class, which is an advantage of E- learning, promotes learner autonomy and improves their language proficiency (Al-Adl, 2016). Learners can practice learning and self assessment at home and they can get any needed knowledge easily. Furthermore, E- learning Provides equal opportunities for all learners, even with learning difficulties or learning disabilities, and this goes in line with the law of No Child Left Behind.

Online learners may have different backgrounds from traditional classroom learners. The expected benefits of learning differ from learner to learner. Thus, the traditional approach that presents one selection to all learners becomes inadequate in an online learning environment because different learners have their different learning styles (Al-Hassan, 2010). Likewise, there are individual differences among learners. Some learners can pass the educational activity in a little time and others are slow learners. E-learning environment can adequately adjust learning to all learners. Learners can take control on what, when and where to be learned.

Zaphiris & Ioannou (2018) expressed the view that an improvement of the IT infrastructure and equipment is needed for the digitalization of teaching at higher education. Ashmarina, & Mantulenko (2020) indicate that digital transformation should be seen not only as technology, but also as organizational changes and new competencies. E-education includes various forms using technology and methodology of education. It includes several forms, e.g. e-learning, blended e-learning, video conferences, virtual class rooms, etc. With implementing digital technologies and non-traditional teaching methods into the process of education, students can gather technical and expert skills in connected with fourth industrial revolution.

Digital transformation can be defined as changes that digital technologies cause and that influence various aspects of human life (Wilms et al., 2017). Kopp, Gröblinger & Adams (2019, p.1449) refers to digital transformation as "the sum of digital processes necessary to achieve a change process that enables higher education institutions to successfully leverage the use of digital technologies". Abad-Segura et al. (2020) indicate that sustainable development of digital transformation in higher education is a priority objective in all advanced educational policy.

E-assessment is defined as using information communication technology (ICT) in the entire assessment process, including designing assignments and storing the results (Bahar & Asil, 2018). Fluck (2011) lists key principles for digital assessment; portability, equity, familiarity and archivability. Digital assessment should be possible to set it up

using almost any available equipment. It should be accessible to a wide range to students including those with learning difficulties or disabilities. Students should be enabled to practice essential skills. Material should be accessible in future years. Kähkipuro (2017) expressed the view that IT needs to be increasingly involved in the core activities of the institution. For instance, in education this involves work with areas like online learning tools, digital assessment and learning analytics.

Higher education institutions may face many challenges in adopting digital transformation. Rodriguez (2017) illustrates that one of the main challenges is the definition of a strategic vision for implementing digital transformation. Another important challenge is the digital literacy of all stakeholders. Teaching staff, students and administration members have different backgrounds and have different behaviors with technology. A third challenge is meeting the new expectations and needs of the students. Students are increasingly demanding an improvement in the "basics" of their experience, and services using multiple platforms or digital curriculum. A fourth challenge is related with the financial and technological constraints of higher education institutions that may hinder its adoption. Therefore, a clear and well- planned vision is required for successful implementation. Selecting the adequate digital approach is needed to meet the needs of students, teaching staff and administration members. Additionally, it is necessary to provide the essential resources for effective implementation.

Similarly, El Kadhi & Al-Sharrah (2011) described the process of digitizing curricula as "creating an online content is a challenge that

faces E-learning adopters. One of the most important elements in creating online content is the level of interactivity with the user; it keeps him attentive all the time" (p.148). El Kadhi & Al-Sharrah (2011) assert that in digitizing curricula one should keep eyes on four important issues; the instructional design process, the standards of building the e-content, the sharable learning objects repository, and the technology used in the development.

Alaugab (2007) conducted a study to explore female faculty and student attitudes toward adopting online instruction, the benefits of implementing online instruction, as well as the most important barriers that might prevent effective implementation of online instruction. Results revealed that faculty and students have positive attitudes

toward online instruction and students had a significantly better positive attitude towards online instruction than faculty.

Teo (2007) found no significant differences in computer attitudes with regard to gender, but boys reported higher positive attitudes towards computers. Dermo (2009) showed that attitudes of male and female students towards the use of web-based assessment did not differ significantly. Jamil, Topping &Tariq (2012) found that female students demonstrated significantly higher levels of interest in online testing than males.

Al Hassan (2016) conducted a study to explore the attitudes and level of readiness, and possible barriers to implementing mobile learning. A questionnaire was administered to 1000 college students.

The findings of the study showed that students had highly positive attitudes toward mobile learning, and they had the necessary technical knowledge to implement mobile learning. However, students were found to have very little experience in electronic and mobile learning.

Zabadi & Al-Alawi (2016) conducted a study to examine attitudes of students towards e-learning. The study participants were (371) students from four colleges and English language center. The findings indicated that participants own a high standard on attitude towards E-learning and their attitude results are significantly vary with their gender, technology usage and skills.

Dumčienė, Saulius & Čapskas (2016) discussed the view that blended learning affects university students' attitudes towards e-learning environments. The study sample involved undergraduate and postgraduate students of three different universities, 156 men and 278 women. Results revealed that students treat traditional "live" lectures more favorably than autonomous studies in thee-learning environment. They tend to believe that the blended learning method is the most acceptable. Male students' and female students' attitudes towards study results in the e-learning environment differ significantly. The majority believe that competences acquired via e-learning and the ones acquired via traditional methods do not differ.

McCarthy (2017) conducted a study to explore using online learning in higher education. Participants of the study included 118 students. Results of the study showed that students have positive attitudes towards engaging in academic discussions online. The majority of

students involved in the two courses enjoyed using the online learning environment, with 85% of students indicating it promoted interaction with peers and generated rewarding academic discussions, and 92% indicated they wanted to use it again in future courses.

Similarly, Bond et al. (2018) examined the use and perceptions of students (n = 200) and teachers (n = 381) on the use of digital tools. Findings reveal that both teachers and students use a limited number of digital technologies for predominantly assimilative tasks. Bahar & Asil (2018) utilized an e–assessment scale was used with a sample of 853 associate degree, undergraduate and graduate students to investigate the influence of gender, computer usage and level of education on attitude towards e–assessment. Results showed that university students who used computers for a longer period of time had significantly higher scores on two e–assessment dimensions than those who used computers less. The students mostly had a positive attitude towards E–assessment. Level of education had no influence on attitude towards e–assessment.

In this view, Rosén & Billore (2019) conducted a study to explore students' attitudes towards the use of digital tools in English learning. Data was collected through a semi–structured questionnaire answered by 155 German and 185 Swedish students, aged 15–16. Results showed that the attitudes towards digital tools for language learning differ between the two favoring the Swedish students. While the Swedish students use a variety of tools, there is a lack of access to digital learning tools in Germany.

Tokareva, Smirnova & Orchakova (2019) conducted a study to determine the quality of implementation and organization of ICT from the point of view of university students. The study sample consisted of 705 students. Results showed that the vast majority of students (94%) would like modern education to be more computerized but they need to be trained on technological literacy. The study emphasizes the importance of successful ICT implementation in higher education institutions. Similarly, Unger & Meiran (2020) conducted a study to assess undergraduate student attitudes towards rapidly shifting to an entirely online learning environment due to COVID-19. Results showed that the majority of students responded that online learning would not be the same as in-class learning (91.5%), indicating a significant difference in responses.

Similarly, Anarinejad & Mohammadi (2020) conducted a study aimed at evaluating enterprise and e-learning programs in universities and institutions of higher education. The study sample consisted of 702 university students. Results of this study revealed some strengths and weaknesses of E-learning systems and by implementing appropriate strategies some of the less, desirable aspects of E-learning systems can be improved.

Indrajit (2020) conducted a study to explore several obstacles of implementing and emerging technologies within the higher-education ecosystem. Findings indicated that there are various obstacles of implementation such as facing some barriers in the process of emerging technologies, handling technical and operational problems, the slow

level of adoption, financial problems, preparing suitable infrastructure and hardware/software problems.

Yulia & Susilowati (2020) conducted a study to design a learning assessment program in education revolution 4.0 in the pandemic period. Some interviews, document analysis, and classroom observation were employed to collect the data of this study. The finding shows that both teachers and students positively responded to digitize their learning assessment to accomodate both their critical thinking and creativity. Similarly, Moralista & Oducado (2020) conducted a study to identify the faculty perceptions toward online education. The study used a descriptive online survey involving a sample of 27 faculty members. Results indicated that the majority of faculty had intermediate computer competency and had no training in online teaching with only a few having a very stable internet connection. Faculty considered that online education will result to more academic dishonesty, will be impersonal and lack feeling compared to face-to-face classes, and will be difficult to manage in terms of technology.

Garris & Fleck (2020) conducted a study to identify students' evaluations of transitioned-online courses during COVID-19 pandemic. The sample consisted of 482 undergraduates. Results showed that the transition was overall evaluated negatively, specifically that the courses became less enjoyable, less interesting, decreased in learning value, facilitated less attention and effort, and incorporating less cultural content after transitioning online.

Alharthi (2020) conducted a study to find out university students' attitudes toward technologies used in online courses. A total of 496 eligible students (268 male and 228 female) participated in the online survey. Results showed that, because of the complexity of the technologies used in these online courses, university students experienced difficulties using these tools and needed additional experience prior to their use in the online courses.

Similarly, Daumiller, et al. (2021) conducted a study to investigate faculty members' attitudes towards the shift from face-to-face to online teaching and examine their associations with underlying motivations as well as burnout/engagement and student learning. Results indicated that learning approach goals of faculty were positively associated with perceiving the shift to online teaching as a positive challenge and as useful for their own competence development.

Summing up, pandemic education or crisis education affected how educational systems transform the frontal practices into digital environments including curricula. This digitization requires assessments for the prevailing attitudes of the stakeholders including mainly students and professors towards the digital curricula they study and the whole process. Therefore, the research attempts to identify the prevailing attitudes of both the students and professors towards digitizing curricula in Egyptian higher education context.

10. Results

The quantitative input in the research was obtained through the analysis of items in the students' attitude scale. Both validity and

reliability measurements were obtained before running the analysis. Validity was run through content validity (jury validation) and through square root of the (r) value and was (0.901). Using Cranach's Alpha statistics, reliability value of the domains of the scale were (.807, .690, .807 and .780) respectively as the following table (1) shows.

Table (1) Reliability Statistics of scale domains

Reliability Statistics	Cronbach Alpha	Var.1	.807	Var.2	.690	Var.3	.807	Var.4	.780	total	.901

The following table shows the means of students' responses to the items of the scale.

Table (2) Students' responses regarding their attitudes towards digitizing English curricula

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
1	**Perceptions of digital transformation & digitizing curricula**					
1.1	Digital transformation of higher education is a desirable step towards better education.	47	28	6	2.5061 73	0.673373
1.2	I have a positive view on digitizing curricula.	47	21	13	2.4197 53	0.718183
1.3	I enjoy reading E- books more than	31	24	26	2.0	0.57064

					617 28	5
1.4	I believe that E−learning enriches the educational process.	52	22	7	2.5 555 56	0.64380 4
1.5	Presenting the curricula in a digital format increases the motivation towards learning.	48	22	11	2.4 567 9	0.74378 9
1.6	In many cases E−learning is a waste of time.	20	21	40	1.7 530 86	0.72915 7
1.7	I encourage my colleagues to study online.	46	18	17	2.3 580 25	0.80475 5
1.8	I feel more satisfied with online assignments than using pen and paper.	40	16	25	2.1 851 85	0.54412 4
1.9	E− Learning can promote my achievement in English courses.	51	25	5	2.5 679 01	0.71056 2
1.10	I support that subjects should be in a digital form.	37	25	19	2.2 222 22	3.78052 1
	Total				2.3 086 42	0.70111 3

No .	Items	Agree 3	Neutral 2	Disagre e	Mean	AVEDEV

				1		
2	*Perceptions of digital transformation & digitizing curricula*					
2.1	I share what I have achieved on social media.	50	16	15	2.432099	0.575522
2.2	I can send and receive E–mails easily.	59	12	10	2.604938	0.659046
2.3	I can interact with educational electronic platforms.	47	22	12	2.432099	0.457247
2.4	I believe the Internet provides an opportunity for autonomous learning in an interesting way.	60	17	4	2.691358	0.743789
2.5	I feel that I do not have sufficient skills to use e–learning tools.	40	21	20	2.246914	0.549307
2.6	I am aware of using digital platforms in learning.	53	22	6	2.580247	0.554793
2.7	I need training in digital curricula before applying to a university program.	52	23	6	2.567901	0.396281
2.8	I prefer using computers and Internet in scientific research.	65	12	4	2.753086	0.495046
2.9	I can learn via Google Classroom.	58	18	5	2.654321	0.548697
2.10	I can deal with audio and video applications.	60	12	9	2.62963	2.877
	Total				2.559259	0.657217

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
3	*E– Assessment Practices*					
3.1	I support the use of E– assessment.	50	16	15	2.432099	0.575522
3.2	I get annoyed when I am assigned a task that requires using a computer or the Internet.	59	12	10	2.604938	0.659046
3.3	I use Google websites to assess what I have learned regularly.	47	22	12	2.432099	0.457247
3.4	Online tasks help me to actively engage with colleagues.	60	17	4	2.691358	0.743789
3.5	I prefer E– exams more than paper exams.	40	21	20	2.246914	0.549307

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No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
3.6	I believe online instant feedback fosters learning process.	53	22	6	2.580247	0.554793
3.7	I believe E– exams are fair.	52	23	6	2.567901	0.396281
3.8	I think digitizing curricula will help me perform better in the results of E– assessment.	65	12	4	2.753086	0.495046
3.9	I can prepare E– assessment instruments using Google forms.	58	18	5	2.654321	0.548697
3.10	I have my own E–portfolio.	60	12	9	2.62963	2.877
Total					2.559259	0.657217

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
4	**_Digital Competences of designing digital content_**					
4.1	It takes longer time to understand digital content than printed one.	31	23	27	2.049383	0.727023
4.2	I share educational content with colleagues online.	45	19	17	2.345679	0.652949
4.3	I can use word processing programs (e.g. MS Word).	51	18	12	2.481481	0.685871
4.4	I can prepare a PDF file.	50	17	14	2.444444	0.668496
4.5	I can use presentation programs (e.g. MS PowerPoint).	51	17	13	2.469136	0.810852
4.6	I can use database programs (e.g. MS Access).	30	16	35	1.938272	0.752934
4.7	I can prepare an Excel Worksheet.	38	21	22	2.197531	0.695016
4.8	I can download an electronic content.	57	8	16	2.506173	0.662399
4.9	I can upload content online.	53	15	1	2.493827	0.702332

				3		
4.10	I feel it is difficult to deal with digital curricula.	23	26	3 3 2	1.888889	3.543667
Total					2.281481	2.378704

Table (3) Estimation of responses

Agree	3 − 2.34
Neutral	2.33− 1.67
Disagree	1.66 − 1

Table (3) shows the correlations of the four parts: there is a strong correlation between the participants' attitudes towards digitizing English curricula over the four sections of the attitude scales (perceptions of digital transformation and digitizing curricula, using electronic tools in learning, e− assessment practices and digital competences).The table shows participants' means in responding to the four sections of attitude scale were high. This result shows that the participants (students) have high positive attitudes towards digitizing English curricula.

The quantitative input was obtained through the analysis of items in the **professors' attitude scale**. Both validity and reliability measurements were obtained before running the analysis. Validity was run through content validity (jury validation) and through square root of the (r) value and was (0.90). Using Cronbach's Alpha statistics, reliability value of the domains of the scale were (0.719, 0.670, 0.722,

0.671) respectively and total reliability value was calculated as (0. 789), which is a high reliability coefficient as the following table (4) shows.

Table (4) Reliability Statistics of professors' scale domains

Reliability Statistics	Cronbach Alpha	Var.1	.0.719	Var.2	.670	Var.3	.722	Var.4	.671	total	0.789

The following table (5) shows the means of professors' responses over the items of the questionnaire.

Table (5) Professors' responses regarding their attitudes towards digitizing English curricula

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
1	**Perceptions of digital transformation & digitizing curricula**					
1.1	Digital transformation of higher education is a desirable step towards better education.	15	3	1	2.7	0.45
1.2	I have a positive view on digitizing curricula.	16	1	2	2.7	0.48
1.3	I enjoy reading E‒ books more than printed books.	4	12	3	2	0.4
1.4	I believe that E‒learning enriches the educational process.	18	2	0	2.9	0.18
1.5	Presenting the curricula in a digital format increases the motivation towards learning.	14	6	0	2.7	0.42
1.6	In many cases E‒learning is a waste of time.	1	4	13	1.35	0.49
1.7	I encourage my colleagues to study online.	14	5	0	2.65	0.49
1.8	I feel more satisfied with online assignments than using pen and paper.	10	4	5	2.2	0.8
1.9	E‒ Learning can promote my achievement in	12	6	1	2.55	0.54

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
	English courses.					
1.10	I support that subjects should be in a digital form.	12	6	1	2.5	0.6
	Total Mean				2.425	

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
2	*Perceptions of digital transformation & digitizing curricula*					
2.1	I share what I have achieved on social media.	8	6	4	2.1	0.72
2.2	I can send and receive E–mails easily.	17	2	0	2.85	0.255
2.3	I can interact with educational electronic platforms.	16	3	1	2.75	0.4
2.4	I believe the Internet provides an opportunity for autonomous learning in an interesting way.	18	2	0	2.9	0.18
2.5	I feel that I do not have sufficient skills to use e–learning tools.	3	9	6	1.75	0.6
2.6	I am aware of using digital platforms in learning.	11	6	2	2.45	0.605
2.7	I need training in digital curricula before applying to university.	11	6	3	2.4	0.66
2.8	I prefer using computers and Internet in scientific research.	18	2	0	2.9	0.18
2.9	I can learn via Google Classroom.	16	4	0	2.8	0.32
2.10	I can deal with audio and video applications.	18	2	0	2.9	0.18
	Total Mean				2.58	

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
3	*E– Assessment Practices*					
3.1	I support the use of E– assessment.	13	5	2	2.55	0.585
3.2	I get annoyed when I am assigned a task that requires using a computer or the Internet.	3	6	9	1.6	0.66
3.3	I use Google websites to assess what I have learned regularly.	15	3	2	2.65	0.525

3.4	Online tasks help me to actively engage with colleagues.	11	8	1	2.5	0.55
3.5	I prefer E– exams more than paper exams.	13	6	1	2.6	0.52
3.6	I believe online instant feedback fosters learning process.	15	3	1	2.7	0.45
3.7	I believe E– exams are fair.	11	7	2	2.45	0.605
3.8	I think digitizing curricula will help me perform better in the results of E– assessment.	19	1	0	2.95	0.095
3.9	I can prepare E– assessment instruments using Google forms.	15	3	1	2.7	0.45
3.10	I have my own E–portfolio.	8	6	5	2.1	0.72
Total Mean					2.48	

No.	Items	Agree 3	Neutral 2	Disagree 1	Mean	AVEDEV
4	*Digital Competences of designing digital content*					
4.1	It takes longer time to understand digital content than printed one.	2	8	10	1.6	0.6
4.2	I share educational content with colleagues online.	15	4	1	2.7	0.45
4.3	I can use word processing programs (e.g. MS Word).	17	2	1	2.8	0.34
4.4	I can prepare a PDF file.	19	1	0	2.95	0.095
4.5	I can use presentation programs (e.g. MS PowerPoint).	17	2	1	2.8	0.34
4.6	I can use database programs (e.g. MS Access).	9	6	3	2.2	0.72
4.7	I can prepare an Excel Worksheet.	9	6	4	2.2	0.72
4.8	I can download an electronic content.	16	4	0	2.8	0.32
4.9	I can upload content online.	9	11	0	2.45	0.495
4.10	I feel it is difficult to deal with digital curricula.	2	6	10	1.55	0.605

Total Mean	2.405	

Following is table (6) which indicates the estimation of responses with regard to the degree of participants' agreement with the scale items.

Table (6) Estimation of responses

Agree	3 – 2.34
Neutral	2.33 – 1.67
Disagree	1.66 – 1

Table (6) shows the correlations of the four parts There is a strong correlation between the participants' attitudes towards digitizing English curricula over the four parts of the attitude scales (perceptions of digital transformation and digitizing curricula, using electronic tools in learning, e– assessment practices and digital competences). The table shows participants' means in responding to the four sections of attitude scale were high. This result shows that the participants (professors and instructors) have high positive attitudes towards digitizing English curricula.

11. Discussion

This research investigated professors' and students' attitudes towards digitizing EFL curricula in the light of digital transformation of Egyptian higher education and COVID– 19 pandemic. Results showed that the participants (students and professors) have high positive attitudes towards digitizing English curricula. Additionally, there was a strong correlation between the participants' attitudes towards digitizing

English curricula over the four sections of the attitude scales (perceptions of digital transformation and digitizing curricula, using electronic tools in learning, e- assessment practices and digital competences).

Results of this study are consistent with Al-Hassan (2016) who conducted a study to explore the attitudes and level of readiness, and possible barriers to implementing mobile learning. Results showed that students had highly positive attitudes toward mobile learning.

On the contrary, the results of this study did not go in line with other studies. For instance, Garris & Fleck (2020) conducted a study to identify students' evaluations of transitioned-online courses during COVID-19 pandemic. The sample consisted of 482 undergraduates. Results showed that the transition was overall evaluated negatively, specifically that the courses became less enjoyable, less interesting, decreased in learning value, facilitated less attention and effort, and incorporating less cultural content after transitioning online. Although the study confirms that students and professors have high digital competences, this is not consistent with the study results of Al-Awadh (2016) which showed that students were found to have very little experience in electronic and mobile learning.

Similarly, the results of the current study agree with Yulia & Susilowati (2020) who conducted a study to design a learning assessment program in education revolution 4.0 in the pandemic period. Results showed that both teachers and students positively responded to digitize their learning assessment to accommodate both

their critical thinking and creativity. The results of the study somewhat go in line with Tokareva, Smirnova & Orchakova (2019) who conducted a study to determine the quality of implementation and organization of ICT from the point of view of university students. The study sample consisted of 705 students. Results showed that the vast majority of students (94%) would like modern education to be more computerized but they need to be trained on technological literacy.

Further, the results of the research are consistent with Sinaga & Pustika (2021) who conducted a study to identify students' attitudes towards online learning. The study utilized a questionnaire as an instrument to collect data. Results showed a positive attitude towards online learning. Additionally, the research results agree with Hamutoğlu, Savaşçi & Sezen−Gültekin (2019) who conducted a study to investigate university professors' attitudes towards e−learning and digital literacy skills. Sample consisted of (N = 47) enrolled in the Department of Computer Education and Instructional Technology. The study also investigated whether these variables vary in terms of gender and prior e−learning experience as well as the potential relationship between their attitudes and their digital literacy skills. Findings indicated the participants' positive attitudes towards e−learning platforms.

Furthermore, the results of the current study are consistent with Daumiller, et al. (2021) who conducted a study to investigate faculty members' attitudes towards the shift from face−to−face to online teaching. Results indicated that learning approach goals of faculty were

positively associated with perceiving the shift to online teaching as a positive challenge and as useful for their own competence development.

12. Recommendations of the research

In the light of the obtained data, the research recommends setting a framework for tracking both students and professors' attitudes, feedback and practices for better EFL curricula digital transformation. Other variables should be investigated in relation to formulating attitudes towards digitizing curricula, e.g. gender, minor, educational stage. Increasing awareness of the benefits of digitizing curricula via online platforms, seminars or social media is highly recommended. The research also recommends holding workshops and trainings that are required to develop digital competences of both students and staff. Another recommendation is involving students and professors in the actual planning of digitizing curricula for better practices.

13. Conclusion and implications

Using the descriptive analytical research designs, the research utilized two attitude scales that aimed at investigating university students' and professors and instructors' attitudes towards digitizing EFL curricula in the light of digital transformation of Egyptian higher education and COVID-19 pandemic. Results showed that the participants (students and professors) have high positive attitudes towards digitizing English curricula. Additionally, there was a strong correlation between the participants' attitudes towards digitizing English curricula over the four sections of the attitude scales (perceptions of

digital transformation and digitizing curricula, using electronic tools in learning, e– assessment practices and digital competences).

Implications of the research could be beneficial for EFL learners, faculty members, course designers and higher education institutions. As to EFL learners and faculty members, they can use the variables in the questionnaire to assess their attitudes towards digitizing EFL curricula considering the four areas mentioned in the attitude scales. Course designers can make use of the recommendations of the research to include attitudes towards digitizing EFL curricula in designing EFL courses, activities' procedures and lessons objectives. Higher education institutions can make use of the results when designing training programs and materials that should consider the four areas discussed in the research.

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